



Brucellosis

(Undulant fever; Bang's disease)

What is brucellosis?

Brucellosis is a disease, caused by the group of bacteria called *Brucella*. This disease may affect various organs of the body.

Who is at risk for brucellosis?

Everyone is susceptible to the bacteria and may get the disease if exposed. People usually are infected in one of three ways: eating or drinking something that is contaminated with *Brucella*, breathing in the organism (inhalation) or having the bacteria enter the body through skin wounds. The most common ways to be infected include eating or drinking contaminated, non-pasteurized milk products and working with infected animals or their tissues.

What are the symptoms of brucellosis?

Symptoms of brucellosis include irregular fevers of varying lengths, headache, weakness, swollen lymph nodes, excessive sweating, chills, weight loss and generalized aching.

How soon do symptoms appear?

The time period is highly variable, five to 60 days, but symptoms usually appear within one to two months.

How is brucellosis spread?

Direct person-to-person spread of brucellosis is extremely rare. Rare instances of infected mothers who are breast-feeding, sexual transmission and contaminated tissue transplantation have been reported.

Typically, brucellosis is spread by eating non-pasteurized milk and other dairy products from infected cows and goats. People also may become infected when they work or handle blood, urine, discharges and aborted fetuses from infected cattle, pigs or goats. In this case, infection occurs through cuts and scrapes in the skin or breathing the bacteria in the air.

When and for how long is a person able to spread the disease?

It is unlikely that this disease could spread from person to person.

How is a person diagnosed?

Brucellosis may be diagnosed in a laboratory by looking at samples of blood or bone marrow. If you think you have brucellosis, contact your health-care provider.

What is the treatment?

Brucellosis can be treated with antibiotics, but treatment can be difficult. Doctors may prescribe doxycycline and rifampin in combination for six weeks to prevent reoccurring infection. Depending on the timing of treatment and severity of illness, recovery may take a few weeks to several months. Fewer than 2 percent of people who have the disease die.

Does past infection make a person immune?

It is unlikely that an individual will catch the disease again.

Should children or others be excluded from day care, school, work or other activities if they have brucellosis?

No. Infants, toddlers and school-age children should not be excluded unless the staff determines the child is unwilling or unable to participate in activities. They also should be excluded if the staff determines that they cannot care for the child without compromising their ability to care for the health and safety of the other children in the group.

All others can attend work and other functions as long as they are well enough to do so. As always, good hand washing and respiratory etiquette is recommended.

What can be done to prevent the spread of brucellosis disease?

Although human brucellosis is rare in the United States, the control of the human disease depends on the removal of the disease in cattle, goats, swine and other animals. Pasteurization of milk and milk products, including soft cheeses, which are meant for human consumption, is important to prevent disease. The certification of raw milk does not eliminate the risk of transmission of *Brucella* bacteria.

Additional Information:

Additional information is available by calling the North Dakota Department of Health at 800.472.2180.

This disease is a reportable condition. As mandated by North Dakota law, any incidence of this disease shall be reported to the North Dakota Department of Health.

Resource: American Academy of Pediatrics. Pickering LK, ed. *Red Book: 2003 Report of the Committee on Infectious Diseases*. 26th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2003:[235-237; 123-129]

